This draft ordinance is intended to provide baseline standards for renewable energy projects. Where a discretionary permit is required, project conditions will be required to address site specific needs.

Please send your questions and comments regarding this draft ordinance via email or postal mail to:

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**LA County Department of Regional Planning** 

320 W Temple St 13<sup>th</sup> Flr Los Angeles CA 90012

Comments on this draft are due November 26, 2013.

ORDINANCE NO.			

An ordinance amending Title 22 . Planning and Zoning . of the Los Angeles County Code related to the establishment of regulations for small-scale renewable energy systems, utility-scale renewable energy facilities, and temporary meteorological towers.

- **SECTION 1.** Section 22.08.040, Definitions (D), is hereby amended to add a definition to read as follows:
- -- %Decomissioning+ means the removal of a utility-scale renewable energy facility from service, which includes safe storage, dismantling, disposal, recycling, and site restoration.
- **SECTION 2.** Section 22.08.070, Definitions (G), is hereby amended to add a definition to read as follows:
- -- %Guy wires+ means wires or cables used to support a wind tower as defined by Section 22.08.230 or other structures that require the use of such wires or cables for support.
- **SECTION 3.** Section 22.08.190, Definitions (S), is hereby amended to add definitions to read as follows:
- "Small-scale solar energy system+means a system where solar resources are used to generate energy primarily for on-site use. Such system may be affixed to either the ground or to a structure other than the systems mechanical support structure, such as a building or carport. Such system shall provide no more than 125% of the on-site energy demand. Any energy generated by a solar energy system that exceeds the on-site energy demand may be used off-site.

- "Small-scale wind energy system+ means a system where wind resources are used to generate energy primarily for on-site use. Such system may be affixed to either the ground or to a structure other than the systems mechanical support structure, such as a building or carport. Such system shall have a rated capacity of 50 kilowatts or fewer. Any energy generated by a wind energy system that exceeds the on-site energy demand may be used off-site.
- -- % olar array+means the mechanically integrated assembly of modules or panels with a support structure and foundation, tracker, and other components, as required to form a direct-current, power-producing unit as defined by the California Energy Commission.

**SECTION 4.** Section 22.08.210, Definitions (U), is hereby amended to add definitions to read as follows:

- -- Utility-scale renewable energy facility, ground-mounted. %Ground-mounted utility-scale renewable energy facility+ means a facility affixed to the ground where renewable resources are used to generate energy primarily for off-site use. This definition includes all equipment and accessory structures related to the facility, including but not limited to solar collector arrays, wind turbines, mounting posts, substations, electrical infrastructure, transmission lines, operations and maintenance buildings, and other accessory structures.
- -- Utility-scale renewable energy facility, structure-mounted. % Structure-mounted utility-scale renewable energy facility+ means a facility affixed to a structure that is separate from the facility mechanical support structure, such as a building or carport, where renewable resources are used to generate energy primarily for off-site

use. This definition includes all equipment and accessory structures related to the facility, including but not limited to solar collector arrays, wind turbines, mounting posts, substations, electrical infrastructure, transmission lines, operations and maintenance buildings, and other accessory structures.

**SECTION 5.** Section 22.08.230, Definitions (W), is hereby amended to add a definition to read as follows:

-- Wind tower+means the vertical component of a small-scale wind energy system, a utility-scale renewable energy facility utilizing wind resources, or a temporary meteorological tower that elevates the wind turbine generator and attached blades above the ground, or the vertical component of a temporary meteorological tower that elevates the wind measuring devices above the ground.

**SECTION 6.** Part 15 of Chapter 22.52 is hereby repealed in its entirety.

SECTION 7. Part 15 of Chapter 22.52 is hereby added to read as follows:

#### **PART 15**

#### **RENEWABLE ENERGY**

#### **SECTIONS:**

22.52.1600	Purpose.
22.52.1610	Applicability.
22.52.1620	Permit Requirements.
22.52.1630	Standards for Small-Scale Solar Energy Systems.
22.52.1640	Standards for Temporary Meteorological Towers.
22.52.1650	Standards for Small-Scale Wind Energy Systems.
22.52.1660	Standards for Ground-Mounted Utility-Scale Renewable Energy Facilities.
22.52.1670	Standards for Structure-Mounted Utility-Scale Renewable Energy Facilities.
22.52.1680	Modifications.

#### 22.52.1600 Purpose.

This Part 15 establishes regulations and permit requirements that support and facilitate the responsible development of small-scale renewable energy systems, utility-scale renewable energy facilities, and temporary meteorological towers in a manner that minimizes potential safety and environmental impacts.

#### 22.52.1610 Applicability.

- A. The provisions of this Part 15 shall apply to the development of any privately-owned small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower on private property.
- B. Exemption. The provisions of this Part 15 shall not apply to any small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower approved prior to the effective date of the ordinance establishing this Part 15.
  - C. Subsequent application. The provisions of this Part 15 shall apply to:
- 1. Any subsequent application that would increase the physical size, height, or footprint of the previously approved small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower; and
- 2. Any subsequent application that would change the type of equipment used by the previously approved small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower, except for substantially compliant replacement of equipment.

22.52.1620 Permit Requirements.

TABLE 22.52.1620-A: RENEWABLE ENERGY PERMIT REQUIREMENTS*						
Permit Required By Zone SPR = Site Plan Review MCUP = Minor Conditional Use Permit CUP = Conditional Use Permit N/A = Not Applicable						
	A-1	A-2, A- 2-H	OS, W	R-A, R-1, R-2, R-3, R-4, R-5, MXD, MXD-RU	C-H,C-1, C-2 C-3, C-M, C-R, R-R, C-RU	M-1,M-1.5, M-2,M-2.5, M-3
Small-Scale Renewable Energy System						
Small-Scale Solar Energy System	SPR	SPR	SPR	SPR	SPR	SPR
Small-Scale Wind Energy System	MCUP	MCUP	N/A	MCUP	MCUP	MCUP
Utility-Scale Renewable Energy Facility						
Utility-Scale Renewable Energy Facility, Ground-mounted	N/A	CUP	N/A	N/A	CUP	CUP
Utility-Scale Renewable Energy Facility, ,Structure-mounted	SPR	SPR	N/A	SPR	SPR	SPR
Temporary Meteorological Tower	SPR	SPR	N/A	SPR	SPR	SPR
* Permit requirements in the coastal zone are subject to the applicable local coastal program.						

- A. Aviation Review. If a minor conditional use permit or conditional use permit is required pursuant to Table 22.52.1620-A above:
- 1. If the proposed project is located within the Military Installations and Operations Areas (MIOAs) as identified by the General Plan, aviation-related agencies shall review the proposed project for any potential impacts to ensure the safety of residents and continued viability of military training and testing operations. At least 60 days prior to the decision by the Reviewing Authority (Director, Hearing Officer, or Regional Planning Commission), the Department of Regional Planning shall distribute copies of the proposed site plan, elevation plan, and location map to the aviation-related

agencies and shall request comments. Aviation-related agencies include but are not limited to the California Department of Transportation Division of Aeronautics, the Department of Public Works. Aviation Division, the federal Aviation Administration (FAA), the County Forester and Fire Warden, the County Sheriff, Edwards Air Force Base, the United States Navy, Air Force Plant, and U.S. Forest Service. The review shall consider the following:

- a. Uses that produce electromagnetic and frequency spectrum interference, which could impact military operations;
- b. Uses that release into the air any substances which may impair visibility such as steam, dust, or smoke;
- c. Uses that produce light emissions which could interfere with pilot vision or be mistaken for airfield lighting such as glare or distracting lights; and
- d. Uses that physically obstruct any portion of the MIOA due to relative height above ground level.
- 2. Any comments received within 30 days of distribution of the proposed site plan, elevation plan, and location map to the aviation-related agencies shall be considered by the Department of Regional Planning and provided to the Reviewing Authority (Director, Hearing Officer, or Regional Planning Commission).
- B. Findings. The Reviewing Authority (Director, Hearing Officer, or Regional Planning Commission) shall not approve a minor conditional use permit or conditional use permit unless the applicant substantiates the following findings:
- All findings required by Part 1 of Chapter 22.56 (Conditional Use Permits);

- 2. All findings required by Part 27 of Chapter 22.52 (Significant Ecological Areas) if applicable; and
- 3. If the requested use penetrates the lower floor elevation of any MIOA, the military operator of the MIOA has determined that the requested use is not detrimental to the function of the MIOA and would not pose a health or safety hazard to the public and military personnel.

#### 22.52.1630 Standards for Small-Scale Solar Energy Systems.

- A. Conformance with state requirements. A small-scale solar energy system shall be in conformance with the California Solar Rights Act (California Civil Code Section 714 et seq.).
- B. Structure-mounted. The combined height of a structure and structure-mounted small-scale solar energy system may exceed the height limit of the zone by no more than five feet.
- C. Setbacks. A small-scale solar energy system shall meet all of the setback requirements of the zone.

#### 22.52.1640 Standards for Temporary Meteorological Towers.

A. Aviation safety. A safety light that meets FAA standards shall be required for any wind tower that exceeds an overall tower height of 200 feet. A safety light may be required on shorter wind towers when deemed necessary by any of the aviation-related agencies or the Department of Regional Planning. No other lights shall be placed on the wind tower.

- B. Climbing apparatus. All climbing apparatus shall be located at least 12 feet above the finished grade and any wind tower shall be designed to prevent climbing within the first 12 feet of wind tower height.
- C. Colors. The colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development or environment.
- D. Location. The minimum distance and safe clearances for a wind tower shall be as depicted in Table 22.52.1640-A. Setback Requirements for Temporary Meteorological Towers and Small-Scale Wind Energy Systems, below. The required distance shall also comply with any applicable fire setback requirements pursuant to California Public Resources Code Section 4290.

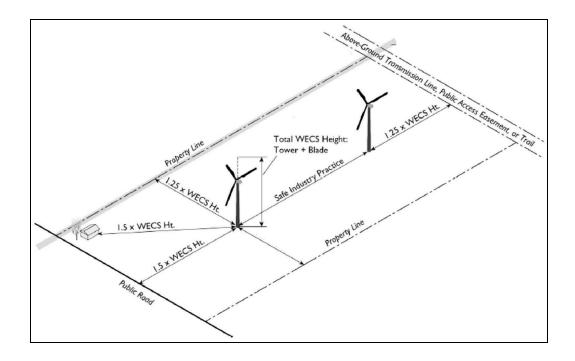
TABLE 22.52.1640-A - SETBACK REQUIREMENTS FOR TEMPORARY METEOROLOGICAL TOWERS AND SMALL-SCALE WIND ENERGY SYSTEMS				
Setback from	Minimum Distance			
On-site Residence or Habitable Structure	1.5 x system height			
Public Road, Highway, or Railway	1.5 x system height			
Above Ground Transmission Line, Public				
Access Easement, or Public Trail	1.25 x system height			
Property Line	1.25 x system height			
Buildings Other Than a Residential Structure	1 x system height			
	As required by the Fire			
Trees	Department			
Scenic Drives and Scenic Routes as identified				
in the General Plan or in an applicable Area or				
Community Plan	1,000 feet			

E. Maintenance. All equipment and facilities shall be maintained in an operational condition that poses no potential safety hazards. Maintenance shall include,

but not be limited to, painting, regularly scheduled cleaning, mechanical/electrical repairs, structural repairs, and security measures.

- F. Maximum number and separation.
- 1. More than one wind tower may be located on the same property if all of the location requirements and standards of this Part 15 can be met for each facility. A maximum of two wind towers are permitted per each five gross acres of land; and
- 2. Wind towers must be separated from each other by the safe industry practice depicted in Figure 22.52.1640-A Separation Standards for Temporary Meteorological Towers and Small-Scale Wind Energy Systems, below.

FIGURE 22.52.1640-A – SEPARATION STANDARDS
FOR TEMPORARY METEOROLOGICAL TOWERS AND SMALL-SCALE
WIND ENERGY SYSTEMS

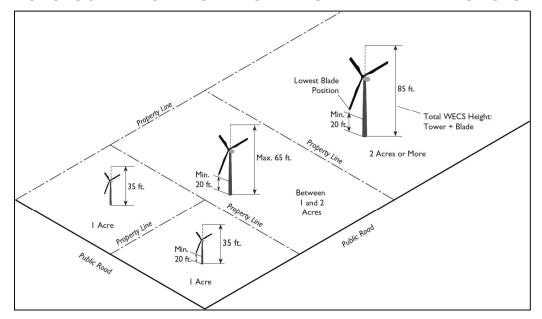


G. Maximum wind tower height. The maximum wind tower height shall not exceed the following height limits as depicted in Figure 22.52.1640-B - Height

Standards for Temporary Meteorological Towers and Small-Scale Wind Energy Systems, below:

- 1. 35 feet above finished grade for lots of less than one gross acre in size;
- 2. 65 feet above finished grade for lots from one gross acre to less than two gross acres in size; and
- 3. 85 feet above finished grade for lots two gross acres or greater in size.

# FIGURE 22.52.1640-B – HEIGHT STANDARDS FOR TEMPORARY METEOROLOGICAL TOWERS AND SMALL-SCALE WIND ENERGY SYSTEMS



- H. Structure-mounted. The combined height of a structure and structure-mounted wind tower may exceed the height limit of the zone by no more than five feet.
- I. Signs. One sign, limited to 18 inches in length and 12 inches in height, shall be posted at the base of the wind tower. The sign shall include a note of no

trespassing, a warning of high voltage, and the phone number of the property owner to call in the event of an emergency.

22.52.1650 Standards for Small-Scale Wind Energy Systems. The following standards shall apply in addition to all standards required by Section 22.52.1640:

- A. Automatic overspeed controls. A small-scale wind energy system shall be equipped with manual and automatic overspeed controls to limit the blade rotation speed to within the design limits of such system.
- B. Blade clearance. No portion of a blade shall extend within 20 feet of the finished grade.

#### C. Guy wires.

- 1. Safety wires shall be installed on the turnbuckles on guy wires for a small-scale wind energy system. Anchor points for any guy wires for a small-scale wind energy system shall be located within the property that the small-scale wind energy system is located on and not on, or across any, above-ground electric transmission or distribution lines; and
- 2. The point of attachment on the ground for the guy wires shall be enclosed by a fence six feet high.
- D. Noise. Noise from a small-scale wind energy system shall not exceed 60 dBA SEL (single event noise level), as measured at the closest neighboring inhabited dwelling, except during short-term events such as utility outages and severe windstorms.

#### E. Visual impact.

- 1. The top of a small-scale wind energy system shall be located at least 50 vertical feet and 50 horizontal feet from a significant ridgeline identified in the General Plan, in an applicable area or community plan, or in an applicable community standards district;
- 2. Any small-scale wind energy system that is placed within the viewshed of a Scenic Drive or Scenic Route identified in the General Plan or in an applicable area or community plan shall be assessed for its visual impacts, and appropriate conditions shall be applied relating to siting, buffers, and design of the system; and
- 3. Within the coastal zone, the placement of any small-scale wind energy system shall not obstruct public views of the ocean from a scenic element (i.e., significant ridgeline, scenic route, scenic area, scenic viewpoint) identified in the applicable local coastal program, unless specific provisions for such siting are provided for in the applicable local coastal program and coastal development permit or long-range development plan.

# 22.52.1660 Standards for Ground-Mounted Utility-Scale Renewable Energy Facilities.

A. Access roads. All temporary and permanent ingress and egress points to the facility shall be designed and sited to the satisfaction of the Director of Public Works and the Fire Department, shall consider adequate spacing from intersections, and shall maintain adequate sight distances.

#### B. Aviation safety.

- 1. A utility-scale renewable energy facility shall not be located within the Runway Protection Zone of any airport, as depicted in the Countys airport land use plans.
- 2. A utility-scale renewable energy facility shall not penetrate the imaginary surfaces (primary, approach, transitional, horizontal, and conical surfaces) defined by the FAA Federal Aviation Regulations Part 77 to protect the use of navigable airspace.
- 3. A safety light that meets FAA standards shall be required for all wind towers that exceed a height of 200 feet. A safety light may be required on shorter wind towers when deemed necessary by any of the aviation-related agencies. No other lights shall be placed on such wind towers.

#### C. Fencing.

- 1. Non-opaque fences may be permitted.
- 2. Fencing up to eight feet in height may be permitted, regardless of any other fencing standards. Such fences shall not be located within 15 feet of a public right-of-way but can be located within the required setback area.
- 3. Fencing type, height and placement shall provide for the minimum corner sight distance to the satisfaction of the Department of Public Works.
- 4. Existing drought-tolerant native or non-native vegetation approved by the staff biologist shall be retained or new such vegetation placed along fencing, between fencing and any public right-of-way, at least 10 feet in depth, unless

determined infeasible or inappropriate by the Reviewing Authority (Hearing Officer or Regional Planning Commission).

- D. Lighting. Night-lighting, limited to that required for safety and security, shall be shielded and directed downward to avoid light trespass and shall consist of:
- Motion sensors for entry-lighting to the on-site equipment structures
   and buildings; and
- Light-sensor or motion-sensor lighting for the main facility access gate and operations and maintenance building doorways and parking areas of projects with operation and maintenance buildings.
  - E. Setbacks. Setbacks from the perimeter of the property line shall be:
    - 1. 30 feet in agricultural zones; or
    - 2. As provided in the base zone for all non-agricultural zones.
- F. Signs. One ground-mounted or pole-mounted project identification sign may be located at each temporary and permanent ingress and egress point. Signs shall include owner information and emergency contact. No other signs shall be installed other than safety, directional, and required warning signs as outlined in Part 10 of Section 22.52.
  - G. Site disruption.
- 1. To ensure dust control and minimal soil erosion, removal of existing vegetation shall be minimized to the greatest extent possible. When necessary to reduce the existing vegetation, seek options to trim rather than remove the vegetation in its entirety. Methods to maintain the vegetation root system shall be used.

- 2. The project shall be designed to minimize erosion, sedimentation, or other impacts to the natural hydrology and drainage patterns of the site. Existing topography and watercourses shall be retained or restored to pre-existing conditions following construction and during operations except for drainage features specifically designed to mitigate drainage impacts. All projects must submit a drainage plan that complies with all requirements to the satisfaction of the Department of Public Works showing the extent of drainage impacts and comply with the most recent County standards for addressing drainage impacts.
- 3. The project shall be designed to minimize grading and amount of ground disturbance in order to control fugitive dust and preserve the natural topography. All projects must show the extent of grading and ground disturbance on all plans and comply with all applicable standards for addressing grading and ground disturbance impacts.
- 4. Fugitive dust emission shall be controlled by phased earthwork, site watering, clean gravel, composted wood chips not to exceed a depth of six inches where applicable, application of non-toxic soil stabilizers, limiting public access on unpaved areas, posting private roadways with reduced speeds, and/or re-vegetation. Use of other suitable fugitive dust mitigation measures may be implemented to control dust during construction, operations, and removal and restoration activities.
- H. Transmission lines. On-site and off-site transmission lines shall be placed underground to the satisfaction of the Department of Public Works and the Department of Regional Planning, except where above-ground right-of-way crossings are required. Disturbed areas shall be stabilized as required in Section 22.52.1660.G.

- I. Visual impact.
- 1. Any utility-scale renewable energy facility that is placed within the viewshed of a Scenic Drive identified in the General Plan or in an applicable Area Plan or Community Plan shall be analyzed for its visual impacts, and appropriate conditions relating to siting, buffering, height, and design of the facility may be imposed to minimize significant effects on the viewshed; and
- 2. Within the Coastal Zone, the placement of any utility-scale renewable energy facility shall not obstruct public views of the ocean from a scenic element (i.e., significant ridgeline, scenic route, scenic area, scenic viewpoint) identified in the applicable local coastal plan unless specific provisions for such siting are provided for in the applicable local coastal plan and coastal development permit or long-range development plan.
- J. Water quality protection. Measures to protect groundwater and surface water from waste discharge shall be incorporated into the project design, as appropriate, and shall meet the requirements of the Regional Water Quality Control Board.
- K. Blade clearance. No portion of a utility-scale renewable energy facility blade utilizing wind resources shall extend within 30 feet from the finished grade.
- L. Impacts to birds and bats. All utility-scale renewable energy facilities utilizing wind resources shall be designed, constructed, and operated pursuant to the California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development published by the California Energy Commission and conditions of

approval may be imposed by the Regional Planning Commission, consistent with these guidelines, to reduce significant impacts to birds and bats.

M. Location. The minimum distance and safe clearances for a utility-scale renewable energy facility utilizing wind resources shall be as depicted in Table 22.52.1660-A. Setback Requirements for Ground-Mounted Utility-Scale Renewable Energy Facility Using Wind Resources. The required distance shall also comply with any applicable fire setback requirements pursuant to the California Public Resources Code Section 4290.

TABLE 22.52.1660-A – SETBACK REQUIREMENTS FOR GROUND-MOUNTED UTILITY-SCALE RENEWABLE ENERGY FACILITY USING WIND RESOURCES				
Setback from	Minimum Distance			
On-site Resident or Habitable Structure	2 x facility height			
Public Road, Highway, or Railway	2 x facility height			
Above Ground Transmission Line, Public				
Access Easement, or Public Trail	2 x facility height			
Property Line	2 x facility height			
Buildings Other Than a Residential Structure	1 x facility height			
	As required by the Fire			
Trees	Department			
Scenic Drives and Scenic Routes as identified				
in the General Plan or in an applicable area or				
community plan	2 x facility height			

- N. Maximum height. Wind tower height shall not exceed 500 feet. A wind tower greater than 500 feet in height requires approval of a variance pursuant to Part 2 of Chapter 22.56.
- O. Decommissioning. In the event that any portion of a utility-scale renewable energy facility is not in operational condition for a consecutive period of six months, ceased operation, or the permit for the use has expired, operations for that use shall be

deemed to have been discontinued. The Department of Regional Planning shall send written notice to the permittee advising of the discontinued use and require that the use be removed from the site within the time period specified below:

- Within six months after the written notice of discontinued use is sent to the permittee, decommissioning of the use shall commence according to the decommissioning plan.
- 2. Within the six month period specified by subsection 1 above, the permittee may provide the Department of Regional Planning with a written request and justification for an extension of up to six months to resume operations of the system, facility, or portions thereof. The Director of the Department of Regional Planning may approve one six month extension.

## 22.52.1670 Standards for Structure-Mounted Utility-Scale Renewable Energy Facilities.

- A. Height. A structure-mounted utility-scale renewable energy facility may:
- 1. Exceed the height limit of the zone by no more than five feet if it is placed on a building that is built to the maximum height limit in a residential or agricultural zone; or
- 2. Exceed the height limit of the zone by no more than 10 feet if it placed on a building that is built to the maximum height limit in a commercial or manufacturing zone.
  - B. Setbacks. Setbacks from the perimeter of the roof shall be:
    - 1. Three feet on residential buildings; or
    - 2. Four feet on non-residential buildings.

C. Accessory structures. Accessory structures constructed for the purposes of operating and maintaining the utility-scale renewable energy facility must meet the development standards of the zone.

#### 22.52.1680 Modifications

- A. Where a site plan review is required pursuant to Section 22.52.1620, a conditional use permit in compliance with Part 1 of Chapter 22.56, is required for the modification of any applicable standards in this Part 15. The applicant for such conditional use permit shall substantiate the following findings in addition to those required by Section 22.52.1620.B:
- 1. Due to topographic or physical features of the site, strict compliance with all of the required standards would substantially and unreasonably interfere with the establishment of the proposed project on the subject property; and
- 2. The requested modifications would not be contrary to the intent and purpose of this Part 15.
- B. Where a minor conditional use permit or conditional use permit is required pursuant to Section 22.52.1620, modification of any applicable standards in this Part 15 may be requested as part of the minor conditional use permit and conditional use permit. The applicant for such minor conditional use permit or conditional use permit shall substantiate the findings provided in subsection A above in addition to those required by Section 22.52.1620.B.